

EXHIBIT 4

QUANTEL LIMITED

DLS 6000/1

OPERATING INSTRUCTIONS

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DLS 6000 OPERATING INSTRUCTIONS

SECTION 1 INTRODUCTION TO THE DLS 6000

1.1 Introduction

The Quantel DLS 6000 is a still picture storage and retrieval system complete with production effects capability. The main elements of the system from an operational point of view are shown below (Figure 1).

The pictures are stored on the discs, and are accessed from these and displayed on the output monitors by the DLS 6000 Main Frame. Control of all recording, replay, effects and library functions is undertaken from the operators control panels.

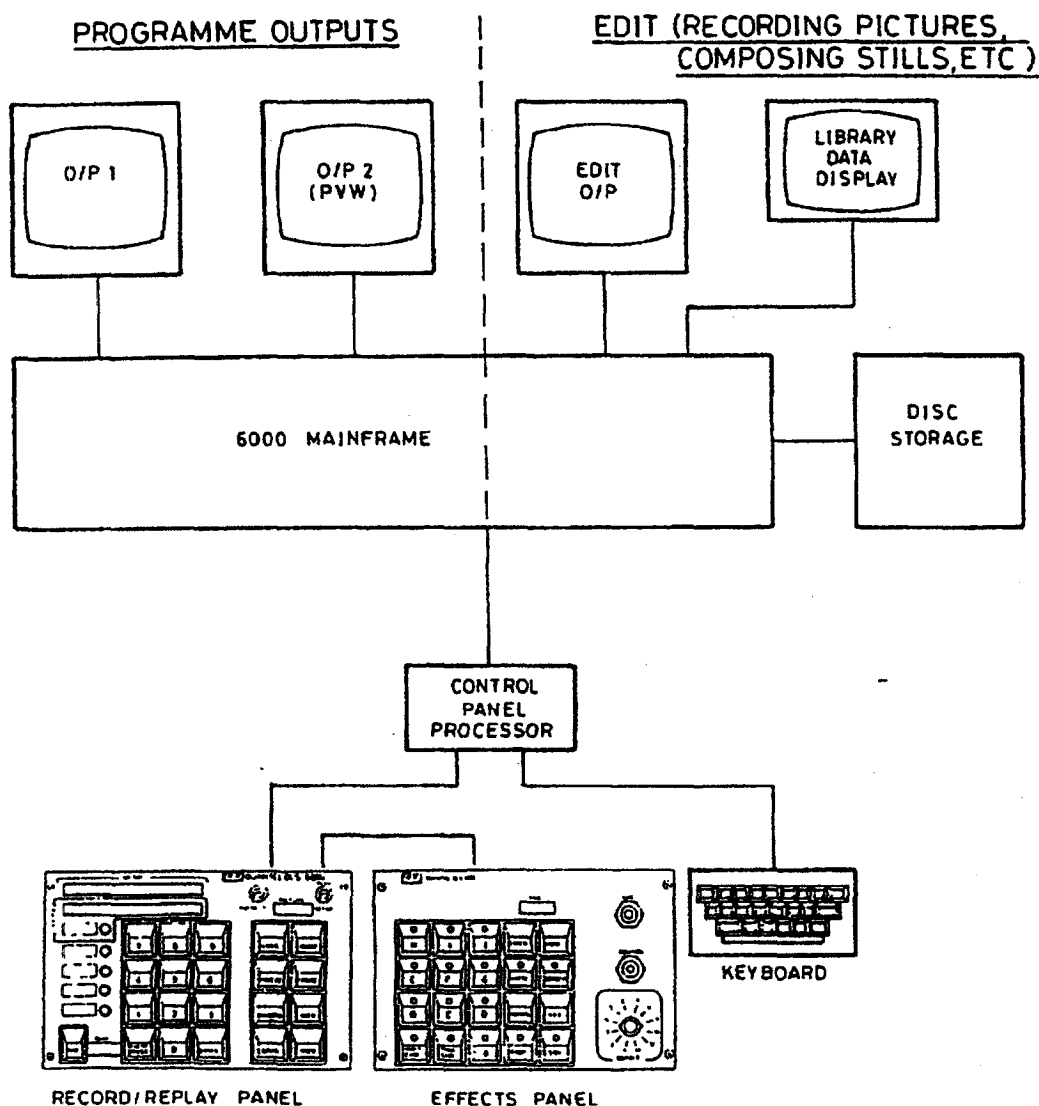


Figure 1 The Main Elements of the System

SECTION 3 OPERATION

3.1 Introduction

The full potential of the DLS 6000 can be somewhat awesome to an operator fresh to the machine. Therefore the following operational procedure has been divided clearly into set areas. It is intended that operators only concerned with certain aspects of the machine may limit themselves to those sections, e.g. the RECORD section may be omitted for operators only using a REPLAY panel.

3.2 Simple Picture Recording

Recording pictures is only possible when in SET UP, so ensure the PLAY/SET UP switch is in the SET UP position. All work done in this position is viewed on the EDITORIAL Monitor.

FREEZE OFF will reveal the input video (for recording) on the EDIT monitor.

FREEZE ON will freeze this input.

This will always appear at this stage as a FRAME freeze. The frozen picture, now a STILL, can now be recorded as a FIELD or FRAME.

FRAME OFF will select a FIELD

FRAME ON will select a FRAME

This should be determined depending on the content of the frozen STILL.

RECORD *PIC : XX* The STILL has been recorded as picture number XX.

In the above example, XX was the next free picture number selected automatically by the DLS 6000. A chosen number may be used however by the following procedure.

1 **2** **3** *TEMP : 123* Select required number (e.g. 123 max. 4 figures).

RECORD *PIC : 123* The still has been recorded as 123.

If the number is already in use, the response will be:

PIC : USED

3.3 Viewing of Recorded Pictures

Any recorded picture can be viewed by the following procedure. This applies both in SET UP, where the viewed picture is seen on the EDITORIAL monitor, and PLAY, where the viewed picture is seen on the main output monitor.

1 **2** *TEMP : 12* Enter the required picture number (e.g. 12)

R.VIEW *O/A : title* The required picture is transferred to the output.
PIC : 12

Subsequent pressing of the R.VIEW button will view the subsequent recorded pictures, e.g.

R.VIEW PIC : 13

R.VIEW PIC : 14

etc. etc.

3.4 Replay of Single Pictures by TAKE

Pictures can also be transferred to the working panel output (PLAY - main output, SET UP- Editorial) by using the TAKE button, e.g.

5 **6** TEMP : 56 Enter required picture number (e.g. 56).

TAKE O/A : title The picture is transferred.
PIC : 56

The important differences between the function **TAKE** and **VIEW** is as follows:-

VIEW is always full size.
Only transfers the VIEWed picture to the main output.

TAKE will allow use of effects.
will preload the NEXT picture in a STACK.

The importance of TAKE will become clear in further sections.

3.5 Composing a STACK ON AIR

This section assumes the panel to be in PLAY.

1 **1** **3** TEMP : 113 Select picture required (e.g. 113)

(N) NEXT : 113 Next picture is 113. Preview store will now be loaded with picture 113.

1 **1** **4** TEMP : 114 The following picture in STACK is selected (e.g. 114).

(1) N1 : 114 The second picture (114) is loaded into the STACK.

9 **6** TEMP : 96 Select third required picture (e.g. 96).

(2) N2 : 96 The third picture is loaded into the STACK.

8 **2** TEMP : 82 The fourth picture in the STACK is chosen.

(4) N4 The fourth picture is loaded into the STACK.

A temporarily 'ON AIR' stack consisting of four pictures has now been made. This can now be played back as described in Section 3.6 'Play Back of Simple Stacks'.

3.6 Playback of Simple Stacks

Any STACK composed as in Section 3.5 'Composing a Stack 'On Air'' may be played back as follow:-

TAKE	PIC	: 113
TAKE	PIC	: 114
TAKE	PIC	: 96
TAKE	PIC	: 82

Notes:

- This section explains how to play back a stack already contained in the visible window. To load a pre-recorded stack into this window and play it back see Section 3.10.
- It is assumed that no production effects have been specified (see Sections 3.8 and 3.9).
- This stack cannot be recorded for playback at a later date (recording stacks must be done in SET UP see Section 3.7).

The concept of the two outputs should clearly be seen. When playing back a stack such as above. The next picture will cut to the output, and the following picture be pre-loaded into the preview framestore each time the TAKE button is pressed.

3.7 Recording a Stack

This must be done in SET UP.

It is important to remember that the 'visible' stack is only a window on the full stack which can be up to 80 pictures long. This window will move up and down the stack with the TAKE button, so it is clear that pictures in a stack can exist above or below the visible window, see Figure 3. The first operation that must therefore be carried out when recording a stack is

CLEAR **STACK**

This will clear the stack of all existing pictures. A stack can then be built in two ways:-

- Successive pictures in the stack are taken, e.g.

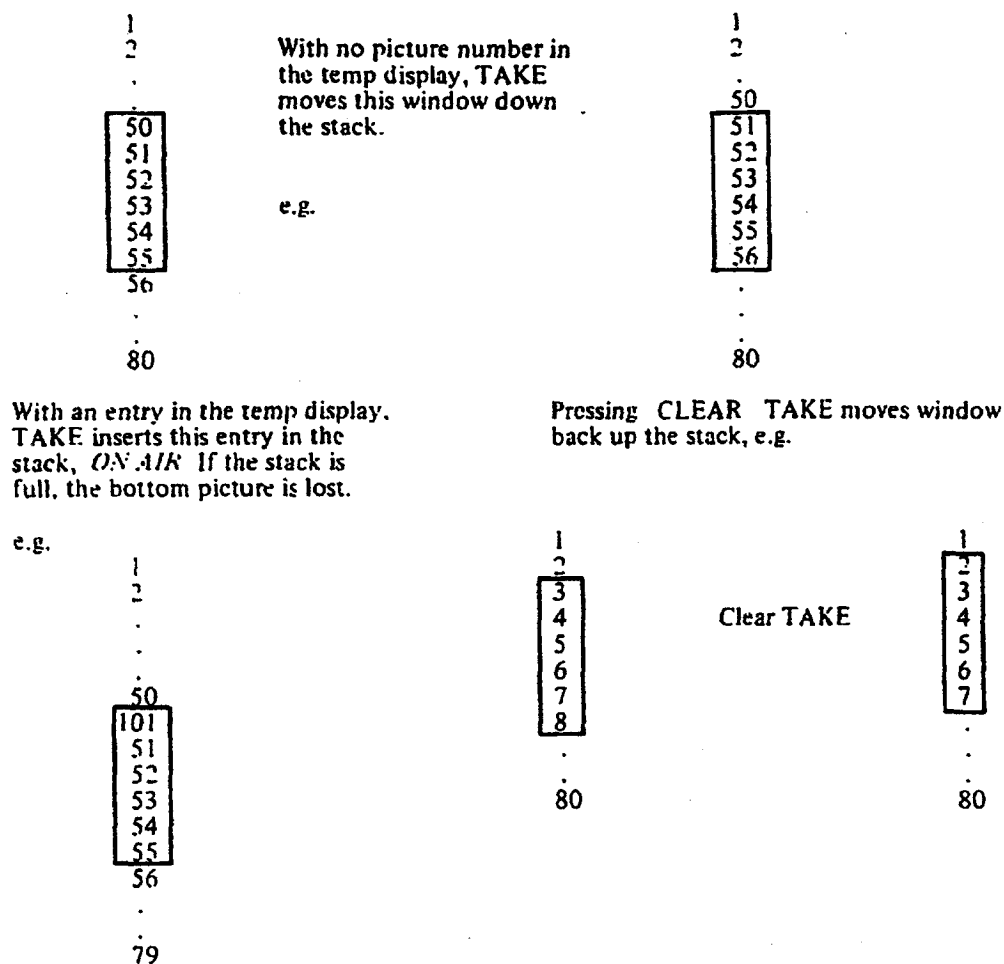
5	6	TEMP	: 56
TAKE		PIC	: 56
1	2	TEMP	: 12
TAKE		PIC	: 12
3	7	2	TEMP : 372
TAKE		PIC	: 372

etc.

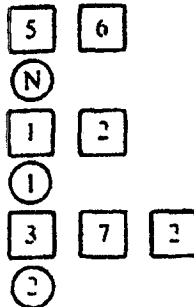
This process can be continued until all required pictures have been recalled (up to a maximum of 80).

Figure 3

Stacks can consist of 80 entries and the control panel provides a visible window on this, e.g.

**Figure 3 Relationship of Visible Window to STACK**

b) Pictures can be inserted in the visible window, e.g.



This process can be continued until the visible window is full. More pictures can then be inserted in position 4, and the existing 4 will be pushed down 'below' the visible window (to position 5), and so on. This again can be continued until 80 pictures are in the stack, at which point the picture 'lowest' in the stack will be lost from the stack.

Note that the two above processes may be intermingled, but that pressing TAKE will insert the picture number in the *temp* register into the top position in the visible window (i.e. On Air). If no picture is called up in the *temp* register, the contents of the visible window will move up one position. This is illustrated in Figure 3.

Any picture can be removed from the visible window by the following procedure:-



CLEAR

This will clear the picture allocated position 1 from the visible window and shuffle up all pictures below.

When the stack is complete it may be recorded as follows

STACK	<i>TEMP</i> : S----
RECORD	<i>PIC</i> : SXX

The stack has now been recorded as STACK XX, where XX is the next available stack number.

Alternatively a Stack number may be defined, e.g.

STACK	3	0	<i>TEMP</i> : S30
RECORD			<i>PIC</i> : S30

If the chosen stack number is already allocated, the response will be:-

PIC : USED

The record procedure must then be repeated with an unused (or undefined) stack number.

This stack may now be played back in PLAY or SET UP modes (see Section 3.10).

3.8 Recording a Stack with Effects

If a production effects panel is fitted to the control station, stacks may be recorded with any of the available effects. This is achieved by selecting the required production effect preselect at the time of loading the picture into the stack.

Note: These preselects can contain any combination of the available effects and details of how to program these is contained in Section 3.9 Composing Effects.

The same procedure is therefore followed as in Section 3.7, but with the following additions:-

- a) TEMP : 52 Select required picture.
 ^{ON} Select required preselect containing effect.
 PIC : 52 Picture and effect are loaded into the stack.
- or
- b) TEMP : 86 Select required picture.
 ^{ON} Select required effect.
 Press next available (or chosen) position in visible window.

As before, either of these processes are continued until the required stack has been built.

Note: The ten available preselects are recorded with the stack, at the time of recording the stack. Thus only ten different effects can be contained within a single stack. This however is not an important restriction, since stacks can be added to stacks and effects used from other stacks (see Section 3.16 Recording Stacks within Stacks).

3.9 Composing Effects

Any of the ten available preselects on the production effects panel can be programmed to contain any combination of the available effects. These are:-

Size, Position, Border, Matte fade time or selectable output. The method of entering each of the effects is identical, and therefore we shall describe how to setup each effect separately. At the point marked * in the instructions it is possible to leave the parameter being set up, and set up a different parameter. The final combination can then be entered together, using the standard routine:-

Enter into the chosen preselect

This does not apply to fade time and output definition functions as these two are mutually exclusive.

Effects may only be composed when the panel is in SETUP.

3.9.1 FADE TIME

This will cause a fade to occur for the defined number of frames when any picture associated with this preselect is called up on the main output. Note that the fade will not occur when previewing the stack on the editorial monitor.

TEMP : 60 Select on keypad number of frames of fade required (e.g. 60 = 2 seconds (NTSC)).

TIME : 60 This transfers the temp display to the TIME display.

* The fade time is entered into the chosen preselect.

3.9.2 SIZE AND POSITION

Any picture can be reduced in size and repositioned on the screen (also partly off the screen). To set up this picture reduction, proceed as follows:-

SIZE^{ON}

SIZE



POSITION

The joysticks are now made operational and a white cursor will appear on the editorial output.

Adjust the size joystick until the cursor shows the required picture size.

Adjust the position joystick until the cursor shows the required picture position.

Note: These two steps can be interchanged and repeated until the required size and position is achieved. The joystick notation

is : both axis move together

horizontal axis only.

4 X 3***ENTER****A-J**

This step is optional and will return the size box to 4 X 3 aspect ratio.

When the required size and position has been obtained they may be recorded into preselect.

3.9.3 BORDER AROUND A REDUCED SIZE PICTURE

There are available twelve different borders which can be selected and stored under the BORDER button. These are selected as follows:-

BORDER

TIME : B XX

This displays the current border number stored under the border button.

If this is not the required border number, release the BORDER button and proceed as follows:-



Select the required border number on the rotary switch (see Appendix for details of available borders).

ENTER**BORDER**

The new border number is entered into the BORDER button.

BORDER

TIME : B XX

The new border number is displayed.

To enter this required border as part of a preselect:-

BORDER^{ON}***ENTER****A-J**

The required border is entered into the preselect.

Notes:

- A border will only be seen on a picture reduced in size.
- The BORDER button always contains the last used border number, whether recorded or played back.

3.9.4 MATTE BACKGROUND BEHIND REDUCED SIZE PICTURES

There are available twelve different mattes which can be selected and stored under the MATTE button. These are selected as follows:-



TIME : B XX

This displays the current matte number stored under the border button.

If this is not the required matte number, release the MATTE button and proceed as follows:-



Select the required matte number on the rotary switch (see Appendix for details of available mattes).



The new matte number is entered into the MATTE button.



TIME : B XX

The new matte number is displayed.

To enter this required matte as part of a preselect:-



ON



The required matte is entered into the preselect.

Notes:

- A matte will only be seen on a picture reduced in size.
- The MATTE button always contains the last used matte number, whether recorded or played back.

3.9.5 OUTPUT SELECTION

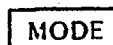
In normal operation the DLS 6000 will always write the next picture into Output 2 (Preview Output), and on a TAKE command transfer this picture to Output 1 (Main Output), via a cut or fade. It then writes the next picture into Output 2.

It is possible to change this by programming as part of a preselect a selectable output. The choices available are:-

- OP1 This will output the picture on TAKE to Output 1, appearing as a vertical wipe.
- OP2 This will output the picture on TAKE to Output 2, appearing as a vertical wipe.
- ALT This will alternately transfer the pictures to the two outputs.

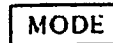
This facility is very useful where both outputs are available at the vision mixer, and can be used to provide mixer effects between one picture and another.

The method of entering one of these options into a preselect is as follows:-



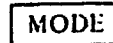
TIME : XX

This displays a fade time.



TIME : OP1

as previously discussed.



TIME : OP2

as previously discussed.



TIME : ALT

as previously discussed.

Continue pressing the MODE button until the required TIME display is revealed.

* **ENTER****A-J**

Enter the required output into a preselect.

3.9.6 DON'T CARE

This button has a very special meaning. If a picture is recorded in a stack with this as its chosen effect parameters, the still will be replayed with the same parameters on the previous still. This can be very useful, as it is only necessary to define the required parameters for the first still of a sequence of stills.

This effect can however be a trap for the unwary.

CLEAR **STACK** resets the effect parameters to 'Don't Care', and if a stack is recorded with only this parameter, the effect parameters of this stack on replay will follow the last effect of the previous stack replayed. This will obviously change if the previous stack is changed, and the user should be aware of this trap.

The 'Don't Care' facility however is a very useful time saving effect when correctly used, and the section on Worked Examples (See XX) provides some illustrations of this.

3.10 Playback of Recorded Stacks

The section assumes the panel is operating in PLAY mode, and the preview and main outputs are both available to the operator. It assumes a stack complete with effects has been recorded as discussed in Section 3.7 complete with effects if required (Sections 3.8 and 3.9).

STACK **1** **2**

TEMP : S12

Stack 12 is preloaded, that is the first picture in this stack is written into the preview output.

TAKE

As for simple stacks subsequent TAKES will transfer the picture in the preview output to the main output. This time however any programmed effect will take place. Fades will occur between preview and output if programmed and then the next picture is written into the preview store. Border and matte information are each written separately, and therefore each of these effects increases the time to 'prepare' the next picture in the preview output. A typical sequence of events would be:-

TAKE**TAKE****TAKE**

- (a) Fade between preview and main output.
- (b) Write Matte into preview store.
- (c) Write Border into preview store.
- (d) Write Picture into preview store.

Thus there can be a delay of up to four seconds between pressing the TAKE button and the next picture is ready for viewing. Early pressing of TAKE will not reveal an incomplete picture, a delay will occur until the next still is complete.

If this delay is unacceptable, the composite picture (with matte and border) can be replayed on the Edit output, and then recorded as a new picture. This can then be replayed as a full size picture with no effects.

3.11 Changing Stacks 'On Air'

This section assumes the replay panel to be in 'PLAY', and a recorded stack is available for replay.

STACK **3** **6** TEMP : S26

TAKE

Stack 26 is preloaded.

TAKE

The first picture in stack 26 is displayed.

The next picture windows will now be displaying the pictures in the stack order, e.g.

TEST PICTURE 100

(N)	100
(1)	101
(2)	102
(3)	103
(4)	104

The next picture title is already displayed in the next picture window. To see the title of any of the following pictures, press and hold its accompanying round button and the title will be displayed in the next picture register, e.g.

TEST PICTURE 102

(N)	100
(1)	101
(2)	102
(3)	103
(4)	104

Note that the picture is not displayed, only its title. Also any preselect associated with this still will be illuminated.

If it is now required to delete this picture, continue to press the round button and press CLEAR, e.g.

 CLEAR

Picture 102 will now be removed from the stack and the following pictures will shuffle up, e.g.

TEST PICTURE 100

(N)	100
(1)	101
(2)	103
(3)	104
(4)	105

To insert the next picture in the stack, first enter its number in the temp. register, e.g.

TEMP : 99 Picture 99.

Now select on the effects panel (if available) any of the ten effects recorded with the stack, don't care or full size.

e.g. ^{ON} Effect A selected.

Now press the small round button corresponding to the position in the stack you wish the picture to be, e.g.



The stack will now show:

TEST PICTURE 100

(N)	100
(1)	101
(2)	99
(3)	103
(4)	104

All pictures below the inserted one will be shuffled down.

The stack has now been modified, and may be replayed as any other stack. Note however the modification has only been made 'on air', no change has been made to the recorded stack.

3.12 Applying Crop to a Picture

When a picture is to be replayed at a small size, it is possible to define an area of the picture to be displayed. This is known as CROP. There are two important features of CROP:-

- No expansion of any picture information is possible. Hence if a size greater than the area of CROP is to be replayed, more picture information outside the crop area is revealed.
- The CROP information is stored as part of the picture on the disc. E.g. if a single picture requires two different crop areas, two pictures each with its own crop must be stored on disc.

To apply CROP to a picture select the replay panel to SET-UP, and proceed as follows:-

^{ON}

TEMP : 56

Select the picture to be cropped.



SIZE/POSITION

Select CROP. Crosswires will appear on the picture which is now displayed on the EDIT output. (These show the current stored crop for this picture).

Use the size and position joysticks to position the crosswires around the area to be cropped.

Record the crop information.

Picture 56 now contains crop information, and this will always be used when the picture is played back. The following section 3.13 explains how this effects picture replay, and how it should be used.

3.13 Playback of Pictures with Crop

The crop applied to a picture will only affect the replay of a picture when it is replayed at a small size. The following illustrations will explain this feature.

CROP applied to picture:-



Replay Size:-

Smaller than Crop Size



Crop Size



Larger than Crop Size



The effect on replay is determined by the following rules:-

- (a) No part of the picture can be expanded.
- (b) All of the crop information is always revealed.
- (c) If size box is larger then the crop 'window', picture information outside the crop window will be revealed.
- (d) Picture information will always fill the size box.
- (e) If the size box is smaller than the crop window, the crop information only will be compressed.



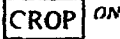



These rules ensure that flexibility in positioning a small cropped picture is maintained, and no black appears around compressed pictures. All pictures are in fact recorded with a nominal crop, this ensures that compressed pictures do not reveal slight blanking errors etc., in the source material.

Note: Non 4 x 3 Aspect Ratio Sizes and Crops








If a full size picture is compressed into a non 4 x 3 aspect ratio, the picture information will obviously be distorted. However, if a new aspect ratio for crop is chosen, and a size box is made to match, no distortion will appear. Size information can be copied into crop by calling up a preselect containing size information while CROP is on. This will put the size crosswires on the screen, and the crop can then be recorded.

Crop information can be copied into size by calling up the required crop, and entering into a preselect A-J. Crop will then go out and the size button illuminate. Examples:





SIZE to CROP

		temp : 56	Select picture to apply crop to.
			Crop on.
			Select required preselect containing size information.
 			Record Crop.

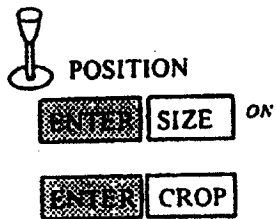
CROP to SIZE

		temp : 56	Select picture containing required crop.
			Crop on with required crop (must be previously recorded).
 			
 			Crop will go off, and size button will illuminate.

Conversely, if a crop is to be placed in a size box of different aspect ratio (i.e. non 4 x 3 crop, 4 x 3 size) it is possible for picture distortion to occur. This possibility can be minimised by recording a 'Forced 4 x 3 CROP'. This will then open out the crop to try and maintain the correct aspect ratio. This can be recorded by the following sequence:

		TEMP : 56	Select picture.
			Select crop.
			Select required crop size and position.





Size and crop are now both on, indicating a Forced 4 x 3 crop.

Record Crop.

The 'forced 4 x 3 crop' has now been recorded.

3.14 Recording Using the Grab Buffer

The Grab button enables live video to be viewed, frozen and recorded using a single button push. With live video at the input to the DLS 6000, pressing GRAB will initiate the following sequence:-

- The video in the framestore is frozen.
- The framestore information is recorded on disc in a special portion called the 'GRAB BUFFER'.
- Live video is restored to the framestore.

This procedure enables the DLS 6000 to be used in a similar way to a camera with motor drive. Large numbers of stills may be taken as live action occurs, and stored automatically in the GRAB Buffer.

The contents of the GRAB buffer may then be viewed, using

G. VIEW

This will view the contents of the Grab Buffer, and the temp register will display the Grab number allocated, e.g. G23. Stills that are required to be saved may then be transferred to the main portion of the disc by pressing RECORD. This will allocate a number and title in the usual way, and also remove them from the Grab buffer.

When all the stills have been viewed, and the required ones saved, the remaining pictures in the Grab buffer can all be erased using

CLEAR/ERASE

GRAB

The Grab buffer is then emptied ready for use again. The Grab buffer contains a maximum of 100 pictures (e.g. G0 to G99) this will be reduced if there is less space available on the disc(s) in the system.

3.15 Stacks Within Stacks

The DLS 6000 library system will allow playback and recording of stacks within stacks. When composing a stack (on air, or in SET-UP), a stack is simply entered instead of a picture number e.g.,

1	3	2	TEMP : 132
(N)			
5	0	9	TEMP : 509
(1)			
S	2	1	TEMP : S21
(2)			

2 7
3

TEMP : 27

On playback, S21 will shuffle up the register until it reaches the on air registers, when it will open to reveal its contents.

Stacks may be built within stacks to two levels deep. Levels greater than this will be ignored. Note that using TAKE to enter stacks into stacks will simply play the chosen stack.

3.16 Erasing Pictures

Pictures can be erased using the Record/Replay Panel in SET-UP only by the following procedure:

5 2 0

TEMP : 520

Select picture to be erased (e.g. 520).

CLEAR RECORD

PIC : OK

The picture has been erased.

If the disc is protected, no erasure will take place and the PIC register will display PROT for protected.

3.17 Erasing Stacks

Stacks can be erased by a similar procedure to that for pictures. The Record/Replay panel must be in SET-UP, and the procedure is:

S 3 7

TEMP : S37

Select stack to be erased.

CLEAR RECORD

PIC : OK

Stack 37 has been erased.

3.18 'Cheapskate' Titling (Set-up Only)

If the keyboard is not in use, there is a simple method of titling pictures or stacks, called 'Cheapskate' titling. The procedure is as follows:

5 2

TEMP : 52

Select in temp register picture or stack number to be titled.

C H E ..

O'A : CHE...

Type on the keyboard the required title.

RETURN

Type return on keyboard and the new title has been entered.

Care should be taken when using this facility that the correct picture is being titled. It is advisable to view the required picture before titling it.

3.19 User Numbers

3.19.1 CONCEPT OF USER NUMBERS

A user number is a feature of the DLS 6000 which allows different operators to use the system at different times, and yet remain confident that all their work remains untouched. The principles are as follows:-

- (a) There are ten user numbers, 0-9.

- (b) An operator, a user, should 'log into' their own number when using the system.
- (c) Each user can then record any pictures or stacks using any numbers in the range available, e.g. 0-9999 for pictures, 0-99 for stacks. It does not matter if these numbers are used by another user, each user has the full range available, e.g.

USER 1 may have picture 100 - PAGE THREE GIRL.

USER 7 may have picture 100 - POPE ARRIVES IN POLAND.

This way each user's work is self contained.

- (d) A user may not view another users pictures using the operator panels. However he may view other users pictures using the keyboard (see Section 4) in which case the pictures will appear to him 'unnumbered'. He may renumber these pictures with his own numbers, and the picture then has two numbers, one for each user. They may then be used as if they were his own pictures, with the restriction that he cannot refer back to crop or erase them.
- (e) Only the 'owner' of a picture can crop or erase a picture. If the owner applies a crop, this crop will appear for all users of this picture. If the owner erases the picture, and it is still in use by another user, it will not be erased from the disc.

Note: The user number feature may be inhibited to allow only USER 0. This may be done inside the DLS 6000 mainframe. Refer to Service Manual for details.

3.19.2 CHANGING USER NUMBERS

To change a user number on the operators panels, proceed as follows:

CLEAR **X** TEMP : USRX Select required user number.

TAKE O/A : USRX Take user number.

You are now operating as USER X on the operators panels. This will be confirmed on the On Air register each time PLAY or SET-UP is selected.

Details of how to change user numbers from the keyboard are contained in Section 4.2.3.

3.19.3 PROTECTING USER NUMBERS

Entry to a user number may be protected by a four-figure pass-number. The pass-number may be chosen and entered from the keyboard (see Section 4.2.3). The procedure then for entering a protected user number from the operators panels is:-

CLEAR **X** TEMP : PASX Select user number.
Passnumber is required.

1 **2** **3** **4** TEMP : 1234 Type passnumber (e.g. 1234)

TAKE O/A : USRX User X is selected.

If an incorrect passnumber is selected, BAD will be displayed in the On Air register and the user number will remain unchanged.

SECTION 4 LIBRARY RECORDS CONTROL

4.1 Introduction

The DLS 6000 keyboard and accompanying monitor display provide all the necessary facilities for examination and upkeep of the library records. They enable pictures to be titled, renumbered, erased, transferred to or from tape backup, and all the other facilities necessary to keep efficient library records. In addition selective searching for pictures by keyword and title is possible, to enable operators to swiftly find pictures on a particular subject.

To enable the library system to work efficiently it is imperative that all operators with access to the keyboard, work within the same terms of reference. These have deliberately been left largely undefined, to enable individual applications to be accommodated very flexibly. It is therefore suggested that before the system goes into full scale use that this section is carefully read and understood. Decisions can then be made on titling, temporary storage, permanent storage, archiving, etc., to suit the particular application. This will then provide the ground rules which obviously must be followed to enable the best use of the DLS 6000 system.

This section will explain the various features and capabilities of the keyboard control of the library records. Sufficient operational detail will be included to allow full use of the system. Please note however, that only rarely is it necessary to define individual keystrokes, as the complete system is very conversational, and prompts and replies are provided to all necessary functions.

4.2 Description

Note: Keyboard control of library records uses the editorial output for some functions. This should be noted by operators.

Keyboard control of the library records is entered by typing ESC on the keyboard. The monitor display will then reveal some status information on the DLS 6000 system. This information is as follows:-

CURRENT USER NUMBER:

Current Preferred Disc:

Drive 0. XX Unused fields, status (e.g. ready, protected).

1
2
3
4
5
6
7

Status information if fitted.

Default picture title:

Default stack title:

User No.

Picture Stack Manage System. Quit : Select Mode

The last line of the display gives the options available to the operator. To select an option type the first letter of the option on the keyboard. The three major commands at this stage enter the three major routines available. These are detailed in the following sections.

4.2.1 PICTURE

Entering this routine displays sixteen picture titles from a buffer of 100. At the bottom of the display are again the options available to the operator. All the available options refer to the buffer of 100 picture titles, or specifically the sixteen displayed picture titles within the buffer. The commands are as follows:

SEARCH This will search all titles in the library system for specific keywords or numbers. Matching picture titles are then placed in the buffer, sixteen of which are displayed on the monitor screen.

Search is probably the most powerful routine, and the following points may be useful when searching for specific titles.

- (a) A search will look for a given character string at the beginning of a word, i.e. keyword AND will find *ANDREW*, *ANDROID*, but not *SAND*.
- (b) ? can be used as a wild card, e.g. ?AND will find *SAND*, *BAND*, etc.
- (c) Two keywords in one title can be given by a space between them, i.e. *PRESIDENT AIRPORT* will find *President Arrives at Airport*, but not *Londons Third Airport*.
- (d) Two separate keywords can be searched together by using & i.e. *GIRL & SHUTTLE*, will find *Page 3 Girl and Shuttle Landing*.
- (e) Typing RETURN instead of a keyword will find all titles in the library.

MORE : This routine will add any remaining picture titles found after search when space is available in the buffer. For instance the library may contain 120 pictures containing the keyword GIRL. The buffer will be full with the first 100 pictures, but 50 of these are *American Girls* and you require *English Girl*. This 50 may then be lost from the buffered (see LOSE), and the remaining 20 added simply by typing M for MORE.

KEEP : This will keep in the buffer titles containing the required keywords, and lose all other pictures from the buffer.

The same notation applies to the keywords as applied to SEARCH.

LOSE : This will remove from the buffer pictures containing a keyword match.

The same notation applies to keywords as applied to SEARCH.

RECALL : This will recall the last step taken from the keyboard.

BROWSE : This will display on the editorial output the sixteen pictures from the title buffer displayed on screen at a 16th of the full size.

UP : This will move the window of sixteen titles of the buffer up the buffer.

DOWN : This will move the window down the buffer.

TITLE : This can be used to retitle an individual picture. It is called up by referring to the reference letter alongside it in the buffer window.

NUMBER : This can be used to number or renumber a picture in the buffer. Individual pictures or groups of pictures can be renumbered together.

ERASE : This is used to erase from the disc all the pictures in the buffer. Selective use of SEARCH, KEEP and LOSE can leave the buffer full only of the pictures no longer required, and then the full buffer can be erased.

VIEW : This will view full size on the editorial output a selected picture from the buffer window. It also displays information about the type of picture, and its current users and owners.

QUIT : This command will revert the display to that detailed in Section 4.2.

4.2.2 STACK

Selecting **STACK** will enter the routine for making or amending stacks. The display will show a list of the first sixteen picture titles in a stack (if one has previously been loaded) and a list of commands at the bottom. These are as follows:

FETCH : This will fetch a stack and display its first sixteen picture titles on the screen in the stack buffer.

RECORD : This will record the contents of the stack buffer (however amended) as a new stack. Note that stacks may be titled as part of this routine.

ERASE : This will erase a selected stack.

UP : This will move the visible window up the stack.

DOWN : This will move the visible window down the stack (to reveal up to 80 entries).

INSERT : This will insert a chosen picture with effects into the stack.

KILL : This will remove a chosen entry from the stack.

GET SIZE : This allows the operator to copy preset information from a known stack into a stack.

CLEAR STACK : This will clear the stack from the screen.

QUIT : This will return to the display shown in Section 4.2.

4.2.3 MANAGE SYSTEM

Entering this part of the library system enable various routines for library management. These are:-

LOAD : This routine will allow pictures to be selectively loaded from the tape-back-up system. **LOAD** can be by keyword if required (options available as for **SEARCH** in Section 4.2.1).

During the **LOAD** operation new numbers may be allocated to the incoming pictures, or they may keep the numbers allocated when put on tape. If it is decided to keep the original numbers, then the DLS 6000 will ask for a **CLASS** number. If during a load an incoming picture number corresponds with one already in the DLS 6000, the picture already stored will be renumbered with the first **CLASS** number. This way any pictures which are renumbered may be easily found by **SEARCH**ing by numbers from the **CLASS** number allocated.

Note: Full details on the digital Tape Back-Up system are contained in Section 5.1.

DUMP : This routine is used for selectively **DUMP**ing pictures onto the tape back-up system in digital form. **DUMP** may be by titles or numbers, and in this way only chosen pictures may be dumped onto a given tape.

USER NUMBER : This may be used to change the **USER** number of the keyboard control. The keyboard may operate in a different user number that the record/replay panels, but when entering keyboard control the panel user number is always transferred.

ENTER-PASSNUM : This is used for entering a four-figure passnumber for the current user number.

Note: Once a passnumber has been entered it cannot be viewed from any of the operators panels.

CURRENT DISK : This routine can be used to change the preferred disc. The DLS 6000 will automatically set the highest number disc in the system as the preferred disc, but this can be overwritten for specific purposes. For instance one disc may be allocated to a current affairs program, and all material for this program entered on this disc. When the program has finished the disc may physically be write-protected by its front panel switch, and no operator control can erase those pictures.

SFT-DEFAULT : This again is a very powerful routine. When pictures are recorded on the DLS 6000 they are given a 'default title'. This is automatically set by the the DLS 6000 to be 00 followed by the four figure picture number. Thus any new picture can be found by SEARCHing by title for 00.

However, it is possible to change the default title to a specified title. E.g. it may be a program name, or the date. In this way all new pictures may be found using the SEARCH routine, but there is already allocated some descriptive comment.

Leading spaces on titles are valid, hence the date may be placed at the end of the title, and descriptive information filled in at the end of each day, for example.

The above rules also apply to STACKS which are also automatically given a default title of 000 followed by the stack number. They also may be given an alternative default title, but note that it is not possible to SEARCH by title for STACKS. It is therefore advisable to incorporate in the stack title the stack number.

PRINT : If an external printer is connected to the printer port details of pictures and stacks may be printed out for reference and accompany digital tape dumps. (See Service Manual for printer port details.)

Print outs may be by keyword and title or by number.

QUIT : This will return to the display shown in Section 4.2.

4.2.4 QUIT

-Typing Q for QUIT when the menu display of Section 4.2 is on screen will shut down the keyboard control. To regain control type ESC.

EXHIBIT 5

Redacted

EXHIBIT 6

Redacted

EXHIBIT 7

VOLUME: I

PAGES: 1-146

EXHIBITS: 40-52

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

----- x
AMPEX CORPORATION,

Plaintiff,

v.

Civil Action

EASTMAN KODAK COMPANY, ALTEK

No. 04-1373-KAJ

CORPORATION and CHINON

INDUSTRIES, INC.,

Defendants.
----- x

CERTIFIED COPY

VIDEOTAPED DEPOSITION of RICHARD J. TAYLOR

April 28, 2006

9:38 a.m.

Ropes & Gray LLP

One International Place

Boston, Massachusetts

Reporter: Michael D. O'Connor, RPR



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10:14:25 1 MR. SUMMERSGILL: He's still answering.

10:14:27 2 A. I will start the answer again. The answer

10:14:29 3 is, no, and I don't see why we would have done,

10:14:32 4 because we were just continuing developing the

10:14:38 5 techniques that we started.

10:14:45 6 Q. In arriving at your opinions in validity,

10:14:50 7 did you consider the fact that under the law patents

10:14:53 8 are presumed valid?

10:15:15 9 A. Yes.

10:15:21 10 Q. On Page 18, Paragraph 51, you refer to the

10:15:38 11 DLS 6000 digital library system and the Boyd article

10:15:45 12 in that context. What's the difference between the

10:15:49 13 DLS 6000 and the DLS 6030 which you discuss

10:15:53 14 elsewhere in your report?

10:16:00 15 A. The 6000 is the generic name for the

10:16:05 16 series. The 6030 was the three frame store version.

10:16:12 17 Q. In the 1980 time period, had that

10:16:15 18 distinction been made or -- strike that. When did

10:16:24 19 the 6010, 6020, 6030 series nomenclature arise; was

10:16:33 20 it after 1980 or had it arisen by then?

10:16:45 21 A. I can't remember when we started using

10:16:47 22 those particular trade names, but the -- no, I'm

10:16:54 23 sorry, I can't remember when we started using those

10:16:57 24 trade names.

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10:16:57 1 Q. Was there a time when the Quantel still
10:17:02 2 store product was just called the 6000, and it had a
10:17:08 3 browse feature and it had a size reducer, and so on?

10:17:11 4 MR. SUMMERSGILL: Objection.

10:17:40 5 A. Was a machine ever sold -- I'm just
10:17:45 6 rephrasing your question, if I'm allowed. Was a
10:17:47 7 machine ever sold that was just called a 6000? I
10:17:54 8 don't remember, but I don't think so. I think the
10:17:56 9 6000 was just a generic name that was used.

10:18:06 10 MR. BEAMER: I ask the reporter to mark as
10:18:07 11 the next exhibit this patent.

12 (Document marked as Exhibit 41
10:18:30 13 for identification)

10:20:25 14 A. This is a patent, the inventors of which
10:20:35 15 were Paul Kellar and Tony Searby.

10:20:39 16 Q. Did the Quantel Paint Box product that was
10:20:45 17 introduced at the NAB '82 embody this invention?

10:20:50 18 MR. SUMMERSGILL: Objection. Foundation.

10:21:09 19 A. I haven't studied this document in detail.
10:21:13 20 I can if you want me to, but certainly this patent
10:21:26 21 came out of work that was being done on the Quantel
10:21:32 22 Paint Box.

10:21:34 23 Q. Was this one of the patents that you've
10:21:37 24 testified about in previous lawsuits between Quantel

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11:22:46 1 operating and service manual. If you could turn to
11:22:55 2 Page 46, which is the last three digits 685 of the .
11:23:02 3 production number entitled "Chapter 4 DPB 7000/1
11:23:11 4 System Overview."
11:23:31 5 A. I don't seem to have a Page 46.
11:23:35 6 Q. If you go to the EKC number, the last four
11:23:41 7 digits 1685. It's towards the beginning of the
11:23:44 8 document.
11:23:45 9 A. Here we go.
11:23:54 10 Q. This is a general system overview for the
11:23:57 11 Paint Box circuitry; is that right?
11:24:06 12 MR. SUMMERGILL: I'm sorry, could I get
11:24:07 13 the question again.
11:24:15 14 (Reporter read back pending question)
11:24:45 15 A. Yes.
11:24:46 16 Q. On the right-hand column, first full
11:24:49 17 paragraph it says, "Pictures are stored by the
11:24:52 18 system on Winchester disks via NSMD interface. The
11:24:58 19 disk sequencer card controls the seek and data
11:25:01 20 transfer operations. The computer has access to
11:25:08 21 directory information on the disk via the disk beta
11:25:10 22 buffer, which can hold data from a whole track.
11:25:15 23 Picture data can be transferred from the disk
11:25:17 24 directly to any of the frame stores. The data is

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11:25:21 1 deserialized on the disk data buffer card but
11:25:26 2 bypasses the buffer and passes through the filter
11:25:30 3 card on the brush bus."

11:25:35 4 Isn't that saying that the disk data buffer
11:25:38 5 itself is not used for data transfers between the
11:25:42 6 disk and the frame store, it's only used by the
11:25:45 7 computer to write directly to the disk or read from
11:25:48 8 the disk?

11:25:54 9 A. The disk data buffer in the Paint Box was a
11:25:58 10 derivative of the disk data buffer on the 6000 still
11:26:04 11 stores. But the Paint Box, it had to be larger, so
11:26:17 12 the data buffer -- there wasn't room for all of the
11:26:26 13 buffering required. So some of it got shunted off,
11:26:32 14 but in essence, the disk data is being buffered,
11:26:42 15 though it's buffered -- what this says -- in the
11:26:47 16 filter card.

11:26:48 17 Although, interestingly, the data could
11:26:50 18 also go into memory that was on the actual disk data
11:26:56 19 buffer card itself. So conceptually, yes, the disk
11:27:03 20 data buffer. Was it that particular card? No. But
11:27:10 21 essentially it is the disk data buffer. It's just
11:27:12 22 that the memory is put into different places because
11:27:16 23 of lack of space.

11:27:17 24 Q. How much data did that buffer hold?

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11:36:49 1 line buffers?

11:36:50 2 A. I think that's correct, yes.

11:36:52 3 Q. So it holds six lines of video data?

11:36:57 4 MR. SUMMERSGILL: Objection.

11:36:57 5 A. I'm not sure -- no, I'm not sure it's

11:37:00 6 saying that.

11:37:13 7 Q. So you don't know how many lines it holds?

11:37:16 8 A. No.

11:37:32 9 Q. In Paragraph 71, which spans to Pages 23

11:37:37 10 and 24 --

11:37:37 11 A. Are you finished with this?

11:37:39 12 Q. I think so. So go to Page 23 and 24,

11:38:10 13 Paragraph 71. Towards the end of that paragraph on

11:38:14 14 the top of Page 24 you say, "But if it were used to

11:38:19 15 browse full-sized images that were stored on disk,

11:38:22 16 it would automatically reduce the size of those

11:38:25 17 images as they were pulled off disk and display them

11:38:29 18 as a montage of reduced-size images."

11:38:34 19 MR. SUMMERSGILL: He's reading from Page

11:38:38 20 24.

11:38:39 21 THE WITNESS: Yeah, I'm looking at Page 23.

11:38:42 22 MR. SUMMERSGILL: You're welcome to look at

11:38:44 23 23 and 24. Look at whatever you need to understand

11:38:46 24 the question, once there's a question.

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11:39:10 1 A. Could you repeat the question, please?

11:39:12 2 Q. I was just calling your attention to the
11:39:14 3 sentence at the end that says, "But if it were used
11:39:17 4 to browse full-sized images that were stored on
11:39:20 5 disk, it would automatically reduce the size of
11:39:23 6 those images as they were pulled off disk and
11:39:26 7 display them as a montage of reduced-size images."

11:39:33 8 My question is, isn't that what's described
11:39:35 9 in Column 1 of the '121 patent? I will place a copy
11:39:41 10 of the patent before you which was previously marked
11:39:50 11 as Exhibit 1, and call your attention to Column 1.
11:40:02 12 For example, starting at Line 34 through Line 43,
11:40:18 13 and also the reference to the '776 patent at Lines
11:40:25 14 50 through 54. Isn't that the precisely the browse
11:40:32 15 functionality that the patent is saying is in the
11:40:35 16 prior art?

11:40:52 17 MR. SUMMERSGILL: Objection.

11:40:52 18 A. I think you asked me a context question.
11:40:57 19 Shouldn't you be asking me about the bottom of Page
11:40:59 20 23 if you're going to ask the question you just
11:41:00 21 asked?

11:41:03 22 Q. I'm asking the sentence about browsing
11:41:07 23 full-sized images on the top of Page 24.

11:41:26 24 A. Column 1 of the patent describes browsing a

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11:41:30 1 full-sized image -- sorry, taking a full-sized image
11:41:37 2 and reducing its size on the fly. But my comment
11:41:46 3 here is also taken with the previous sentence, which
11:41:48 4 is saying that if it's browsing reduced-size image
11:41:53 5 that already existed on the disk, it did not change
11:41:56 6 its size, and that most definitely is not included
11:41:59 7 in Column 1 of the patent.

11:42:02 8 MR. BEAMER: We have to change the tape, so
11:42:04 9 maybe we should just take a break and come back.

11:42:08 10 VIDEOGRAPHER: The time is 11:42 a.m. This
11:42:10 11 is the end of video cassette number one, the
11:42:13 12 deposition of Richard Taylor. We are off the
11:42:32 13 record.

11:42:33 14 (Recess)

11:47:14 15 VIDEOGRAPHER: This is the beginning of
11:47:16 16 video cassette number two in the deposition of
11:47:20 17 Richard Taylor. We are back on the record.

11:47:21 18 By MR. BEAMER:

11:47:21 19 Q. I place before you a copy of Taylor patent
11:47:24 20 40302776, previously marked as Exhibit 32 at your
11:47:28 21 earlier deposition. Is it correct that this patent
11:47:40 22 describes the circuitry of the DLS 6000 still store?

11:47:45 23 MR. SUMMERSGILL: Objection.

11:47:52 24 A. That's a very sweeping statement. I don't

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03:57:35 1 and store reduced-size images to take, for example,
03:57:51 2 you could have a full-sized image, followed by a
03:58:00 3 reduced-size version of that full-sized image,
03:58:02 4 followed by a second full-sized image, followed by a
03:58:07 5 reduced-size version of that second full-size image,
03:58:11 6 and so on, and so forth, which, as I understand it,
03:58:17 7 is one of the features that your clients -- which is
03:58:26 8 in dispute, and nowhere do I find in the '776 patent
03:58:32 9 that description I've just given. Nor can I even
03:58:39 10 with hindsight find something in the '776 that
03:58:42 11 points me to that.

03:58:43 12 Q. How did the stack/don't care function do
03:58:46 13 what you just said?

03:58:53 14 A. Interesting, it wasn't just a scientific
03:58:56 15 experiment. It was used very frequently in the U.K.
03:59:00 16 quite a lot, and I think here in the U.S. as well.
03:59:04 17 You would have an anchorman would start a story and
03:59:09 18 have a frozen picture that was quarter size on his
03:59:21 19 shoulder. Then they would want to go from the
03:59:25 20 camera shot of the anchorman and still picture to a
03:59:31 21 full-sized picture with the anchorman still voicing
03:59:36 22 over. So you would have a reduced-size picture and
03:59:43 23 a full-sized picture of the same image.

03:59:46 24 The way that was done was on the control

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03:59:48 1 panel. You had the ability to set up a size
03:59:58 2 reduction and a position, and you could have
04:00:00 3 alternatively, as you were going from still one/
04:00:05 4 store two on the output, store one would produce a
04:00:10 5 reduced-size image, and store two would produce a
04:00:14 6 full-sized image, and sometimes they also wanted to,
04:00:22 7 actually store the reduced-size image, and so they
04:00:25 8 would make sure that was recorded back. So you
04:00:27 9 would actually have two versions in the machine, and
04:00:32 10 none of that is in the patent -- sorry, in the '776
04:00:35 11 patent.

04:00:36 12 Q. Well, each of those full-sized and
04:00:43 13 reduced-size images had to be preprogrammed as part
04:00:46 14 of the stack, right?

04:01:01 15 MR. SUMMERGILL: Objection.

04:01:02 16 A. I have to be careful I'm answering the
04:01:04 17 right question. I'm not sure I understand what you
04:01:07 18 just said. You have your output device -- sorry,
04:01:12 19 your output display panel, you would set up what you
04:01:16 20 wanted in terms of position and size. Then, yes,
04:01:20 21 you would have to tell it that you wanted a
04:01:26 22 full-sized picture of Boston Harbor. But the next
04:01:31 23 time you push the button, you would automatically
04:01:35 24 get the reduced-size picture of Boston harbor.

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04:01:43 1 Q. Because you didn't change the parameters of
04:01:46 2 the size reduction?

04:01:47 3 A. Because the stack/don't care was able to
04:01:50 4 simply say, okay, every time I'm asked to output
04:01:53 5 from that store, I will output that size and
04:01:56 6 position.

04:01:57 7 Q. So I don't really understand why you're
04:01:59 8 saying the '776 patent doesn't disclose that,
04:02:02 9 because the '776 patent allows you to save any
04:02:06 10 picture to generate any picture at any reduced-size
04:02:13 11 factor? So first you generate a first picture at a
04:02:16 12 certain reduced size, then a second, then a third.
04:02:20 13 What is it about the stack/don't care that makes any
04:02:23 14 difference?

04:02:31 15 A. I don't think anything of what you just
04:02:33 16 said covers the situation where you can have a
04:02:36 17 full-sized image followed by a reduced-size version
04:02:40 18 of that full-sized image every single time. You are
04:02:44 19 using hindsight. You are using the fact that I've
04:02:47 20 just said that to go back and kid yourself it's in
04:02:50 21 the patent, when it's not.

04:02:58 22 Nowhere in the patent can you take me to
04:03:01 23 tell me that that actually is disclosed, because
04:03:03 24 it's not in the '776. And the reason it wasn't, it

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04:03:12 1 had never even been thought of.

04:03:17 2 Q. I guess I'm still having trouble
04:03:20 3 understanding what the pertinence of that is to the
04:03:22 4 patent, to the '121 patent, the ability to
04:03:28 5 successfully display a full sized, then a reduced
04:03:32 6 size, then a full size, then a reduced size. What,
04:03:35 7 if anything, does that have anything to do with the
04:03:38 8 patent?

04:03:42 9 A. Because you are generating a corresponding
04:03:52 10 reduced-size image for each full-sized image.

04:04:03 11 MR. SUMMERGILL: When we get to a -- you
04:04:05 12 guys can keep going, but when we get to a good
04:04:08 13 breaking point, we have been going about an hour.

04:04:10 14 MR. BEAMER: Okay. Let's take a break.

04:04:12 15 VIDEOGRAPHER: The time is 4:04 p.m.

04:17:01 16 (Recess)

04:17:10 17 VIDEOGRAPHER: The time is 4:17 p.m. We
04:17:12 18 are back on the record.

04:17:12 19 BY MR. BEAMER:

04:17:13 20 Q. Just to follow up on this stack/don't care
04:17:16 21 function, you described the ability to alternatively
04:17:20 22 generate a full sized, then a reduced size, full
04:17:26 23 size, then a reduced size. This didn't include the
04:17:29 24 steps of storing each such picture back into disk,

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04:17:32 1 does it? In other words, the stack/don't care
04:17:40 2 function didn't affect the storage of a reduced-size
04:17:46 3 image onto disk, did it?
04:17:49 4 A. Not in itself, no.
04:17:51 5 Q. On Paragraph 154, you talk about -- that's
04:17:58 6 on page 50 -- you talk about the DLS 6030 generating
04:18:07 7 reduced-size images corresponding to full-sized
04:18:11 8 images. That could also be done with the '776
04:18:14 9 disclosure, correct? You could generate
04:18:18 10 reduced-size images corresponding to full-sized
04:18:21 11 images in the manner that you're using that term in
04:18:28 12 Paragraph 154?
04:18:50 13 A. The 6030 could generate from a full-sized
04:18:57 14 image and allow a lower resolution version of that
04:19:04 15 full-sized image, and the '776 does describe
04:19:17 16 capability of doing that.
04:19:19 17 Q. And Paragraph 155, you talk about the
04:19:24 18 ability for a user to adopt a naming convention so
04:19:30 19 as to associate full-sized and reduced-size images
04:19:37 20 stored on disk. The '776 patent discloses a system
04:19:40 21 that could also do that, right?
04:19:47 22 A. Where does it do that?
04:19:50 23 Q. Excuse me?
04:19:51 24 A. Does it? Where does it do that?

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04:46:10 1 about either what they were going to see or what
04:46:13 2 they had seen.

04:46:18 3 Q. How many such people received this manual
04:46:20 4 prior to April of '83?

04:46:22 5 A. There was a lot of interest in the machine.
04:46:29 6 So I'm sure a lot of people would have seen it.

04:46:37 7 Q. By the way, let me hand you the document
04:46:39 8 that we're talking about. It was marked as Exhibit
04:46:43 9 13 in your previous deposition. This is the
04:46:49 10 document that you're referring to in Paragraph 170;
04:46:52 11 is that right?

04:47:05 12 A. It looks like it, yes.

04:47:13 13 Q. On Paragraph 177, you refer to the ability
04:47:18 14 to store reduced-size images referred to in the user
04:47:25 15 guide and you refer to page EKC 002000507. Could
04:47:31 16 you turn to that page, please. Could you explain
04:47:53 17 exactly what steps are required in order to resize
04:47:59 18 the cutouts as described here?

04:48:33 19 A. Let me preface my answer by saying that
04:48:36 20 Paint Box is a very broad machine, and what's being
04:48:43 21 described here is in addition to what I say in --
04:48:53 22 was it 177. There are other facilities discussed,
04:49:00 23 like draw stencil, which is no relevance to this
04:49:05 24 litigation.

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04:49:06 1 So with that preamble, the steps would be
04:49:16 2 to -- if you wanted to reduce a full-size image and
04:49:20 3 store it onto disk, you would select cuts, it would
04:49:38 4 actually be cut all in this case. You would then
04:49:44 5 have the image cut out. You would then resize it,
04:49:50 6 and you would then stick it down. You could then
04:49:59 7 cut out the stuck down image. If you stored it on
04:50:04 8 disk, it would be a reduced-size version of the
04:50:08 9 full-size image stored on disk.

04:50:12 10 Q. Where does the stencil referred to here fit
04:50:17 11 into this process?

04:50:19 12 A. That's if you actually wanted to draw
04:50:22 13 around an object. As I say, that's an additional
04:50:29 14 facility that would interest an artist, where you
04:50:32 15 could, say, isolate the television camera in this
04:50:36 16 room by drawing around it, and then you could cut
04:50:42 17 out just the television camera, resize it, stick it
04:50:49 18 down, store that cutout onto disk if you wanted to,
04:50:54 19 resized.

04:50:59 20 Q. So that's what's being referred to in this
04:51:03 21 section on Page 38 of Exhibit 13?

04:51:07 22 MR. SUMMERGILL: Objection.

04:51:09 23 A. In addition to -- again, with my preamble
04:51:12 24 before -- the basic cutting out and sticking down,

EXHIBIT 8

Redacted